

(09/973,270)

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Docket No. PD-89418A

In the Specification:

Replace Paragraph 0006 as follows:

[0006] Currently the downconverters are used to convert mobile signals at frequency bands below C-band, down to baseband. In the future, as technology progresses, different downconverters and possibly corresponding filters will be needed to convert signals for other applications in higher frequency bands such as [[SHF]] the super high frequency band (SHF), KU band, and [[EHF]] extremely high frequency (EHF) band. Unfortunately, increasing satellite communication system versatility, ability to downconvert, and filter higher frequency bands with larger bandwidths increases electronic component count, and system complexity, therefore, increasing cost.

Replace Paragraph 0042 as follows:

[0042] The faster the A/D converter 29 the shorter the aperture time (α). However the reverse shall not be true. Although α is shortened to allow energy to be charged during a small fraction of the carrier frequency cycle, the sampling rate is still determined by the ~~Nyquist~~ Nyquist rate to avoid spectrum overlapping. The relationship between α and f_s is:

$$1/(A * f_s)$$

where A is a constant and depends on the particular A/D converter.